

地震紀錄報告

南京水晶台

與中國科學院
地球物理研究所合作

一九五〇年一月至六月

SEISMOGRAPHIC REPORT

SHUITSINGTAI SEISMIC STATION
NANKING, CHINA.

In cooperation with
Institute of Geophysics and Meteorology,
Academia Sinica.

January-June, 1950.

中國南京(五)珠江路九四二號
中央地質調查所
地球物理研究室刊行

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Shuitsingtai Seismic Station,
Nanking, China.

Jan. - Jun., 1950.

位置：
Location

入：118° 47.9' E, ϕ : 32° 02.8' N, h: 7 m.

儀器：
Instruments

- I. 加利清魏利浦式地震儀，垂直，南北，東西向各一架。
Galitzin-Wilip, Z-comp., NS-comp., and EW-comp. each.
- II. 自製I-式 100公斤水平擺地震儀，南北及東西向各一架。
Self-made I-type 100-kg. Horizontal Pendulum, NS-Comp. and EW-comp. each.
- III. 維開式地震儀，200公斤水平式一架，80公斤垂直式一架。
Wiechert, 200-kg. Horizontal, 80-kg. Vertical each.

震儀常數：
Constants

I

方向 Component	T_0 sec.	T_1 sec.	μ^2	$KA/\pi l$
N	11.4	11.6	+0.06	685
E	10.1	9.9	+0.07	569
Z	6.3	3.1	—	—

II

	T_0	V_0	ϵ_0	r/T_0^2
N	4.2	130	—	0.0013
E	4.2	130	—	0.0014

III

六月一日定
due Jun. 1.

N	1.8	130	3.6	0.005
E	1.8	130	3.3	0.005
Z	1.8	100	3.5	0.004

簡寫說明：

Abbreviations G=加利清魏利浦式紀錄 Record from Galitzin-Wilip.

I = I-式紀錄 Record from I-type.

W=維開式紀錄 Record from Wiechert.

T = 地面震動週期 Period of earth movement, in second.

A = 未核算之雙震幅 Unreduced double amplitude, in millimeter

Δ = 震中距離 Distance from epicenter, in degree.



編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G. M. T. h m s	T	A	△	備註 Remarks
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一月 January

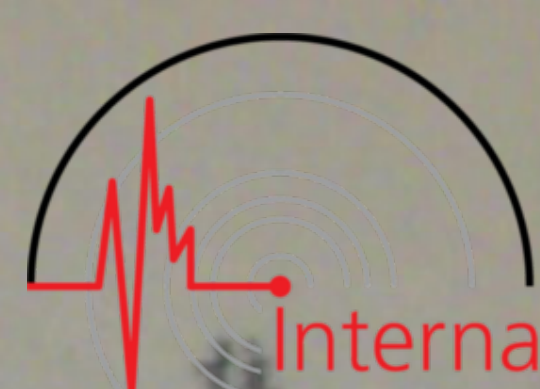
294	3	I W		e	02 55 24				18
				P	55 30				
		I	N	i	55 41				
		I W		S	58 25				
295	23	I W		eP	10 04 52				12.5
				S	06 55				
296	24	W		e	23 20 35				極微 Trace
297	25	I W		e	11 17 26				
				e	19 44				
298	25	I W		e	11 34 34				
		W	E	M		1.5	1.5		
299	25	I W		e	11 46 55				
				e	47 35				
300	25	I W		e	12 01 44				
				e	03 21				
		W	E	M		1.5	2.5		
301	25	I W		e	16 08 10				
				e	08 58				
302	25	I W		e	20 59 56				

二月 February

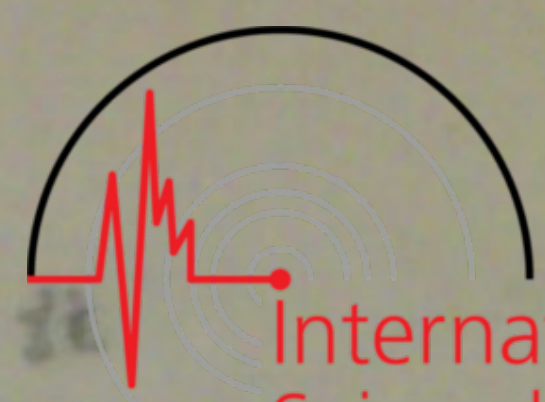
303	2	I W		e	23 02 09				
304	2	I W		P	23 38 10				23
				PP	38 40				
				S	41 52				
				L	43 34				
		I	E	M		4.5	81		
305	3	I W		P	02 56 19				
				S	03 00 02				
		I	E	M		5.5	60.5		
306	3	W		e	13 13 08				
		I	E	e	14 14				



編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G. M. T. h m s	T	A	△	備註 Remarks
307	22	I W		Pn	10 55 47			2.5ca	
				P*	55 50				
				i	55 52				
				Pg	55 56				
				S*	56 20				
		W	N	M		1	35		
		W	E	M		1	44		
308	22	I W		eP	16 17 56			2.5ca	
				eS	18 28				
309	25	I W		iP	09 54 16				
		I	N	M		6	4		
310	28	I W		iP	10 25 43			25	深源
		I		pP	26 50				Deep-focus type,
		W		pP	26 47				h=0.04ca.
		I	N	i	26 51	4	62		
		I	E	i	26 52	4	44		
		I W		iS	29 44				
		I	N	i	30 01	4	61		
		I	E	i	30 10	4	33		
三月					March				
311	7	I W		iP	02 12 45			25	可能深源
		I	N	i	12 59	4	10		Probably deep.
		I W		S	16 45				
		I	N	i	17 03	5	7		
		I	N	M		13	2.5		
312	14	G	Z	P	03 29 34				深源
				i	29 43				Deep-focus type.
				i(pP)	29 56				
				e	30 22				
				i	33 22				
				i	33 31				
313	15	G	Z	e	17 47 18				弱 Small
314	16	G	Z	iP	19 35 57			20	
				i	36 05				
				e	36 19				
				i	39 42				
				e	40 02				
315	18	G	Z	iP	04 59 13				
				i	59 20				



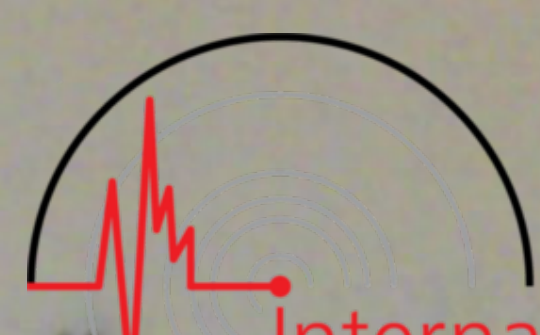
編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G. M. T. h m s	T	A	△	備 Remarks
				i	59 40				
				i	59 45				
				e	05 02 19				
				i	03 05				
316	18	G	Z	e?	16 53 06				
				e?	53 36				
317	21	G	Z	eL	04 51 10				
				M		12	3		
318	21	G	Z	P	09 34 19	4	3	28	弱 Small
				e(PP)	34 46				
				e(S)	38 41				
319	22	G	Z	eP	21 09 50			11.5	
				S	11 43				
				iL	11 56				
320	23	G	Z	i(P)	10 45 30				
				i	45 40				
				i	45 51				
				i	46 18				
				e	48 23				
321	27	G	Z	iP	13 12 07	4	3	45	
				i	12 13	6	12		
				i	12 43				
				iPP	13 52				
				i	14 11				
				(S)	18 38	4	3		
				i	18 47				
				iSS	21 21				
				L	24 08				
				M		13	6		
322	27	G	Z	iP	21 26 10	4	6	45	
				i	26 55				
				iPP	27 52				
				i	28 14				
				i	32 04				
				S	32 43				
				L	39 30				
				M		15	14		
323	28	G	Z	e	12 37 03				極微 Trace
324	29	G	Z	e	13 05 32				極微 Trace



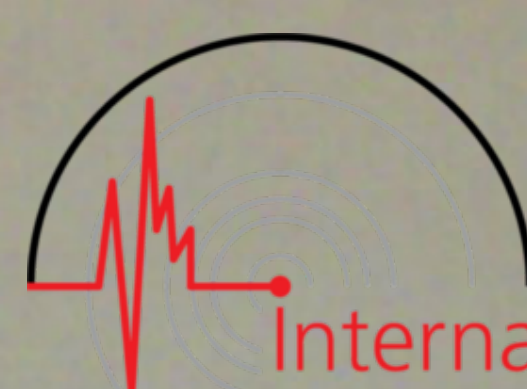
編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T. h m s	T	A	Δ	備註 Remarks
325	29	G	Z	iP iPP i i (S) SS L	17 48 45 50 15 51 05 54 34 54 56 57 43 57 49			40.5	
326	31	G	Z	i	16 04 52				微 Very small
						四月 April			
327	1	G	Z	(e) iS iL M	02 12 07 14 13 14 24			10.5	
						6	14		
328	1	G	Z	e iS iL M	02 25 04 27 12 27 22			10.5	
						7	21		
329	1	G	Z	(e) iS iL M	03 06 09 08 14 08 23			10.5	
						7	28		
330	1	G	Z	iS iL M	03 17 54 18 05				可能係餘震，前段被前震餘波所蔽。 After-shock probably, initial masked by previous coda.
						3	8		
331	2	G	Z	eL	08 01 01				極微 Trace
332	4	G	Z	iP i eS L M	03 45 21 45 35 47 14 47 32	4 4	5 4	11.5	
						11	9		
333	4	G	Z	e iP i iS i e(L) i? iM	18 49 10 49 19 49 28 53 39 54 35 54 41 56 29 56 43			29	
						6?	91		



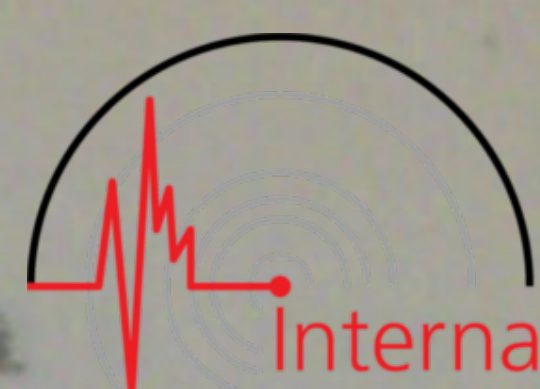
編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T. h m s	T	A	△	備 Remarks
334	5	G	Z	(e)	09 45 47				微,又為脈動所蔽。 Very small, masked by microseisms.
335	8	G	Z	P i	11 32 46 35 59				微,但清晰。 Very small, but clear.
336	14	W		e?	16 18 50				
337	14	G	Z	iP i(pP) i e e	20 19 38 20 05 20 16 21 42 25 26				
338	14	G	Z	(e) e e(S) eL M	23 01 12 03 18 04 15 05 01	12	9		記時器發生障礙。 Time-mark failed.
339	16	G	Z	(e) iP e(S) eL	16 23 08 23 22 26 56 27 30				
340	17	G	Z	e e M	04 27 27 29 14	8	6		
341	18	G	Z	e	15 32 18	25			
342	20	G	Z	iP i i i S i i L M	09 55 38 55 53 56 00 56 29 10 01 18 01 52 02 23 05 06			40	
						7	10		
343	24	G	Z	e	15 31 40				極微 Trace
344	26	G	Z	iP i iPP i iS i	07 08 18 08 28 08 36 08 57 11 06 11 15	6	14	17	深源? Deep?
						8	37		西安台: Record of Sian: P: 07 08 58 S: 13 03



編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T. h m s	T	A	Δ	備註 Remarks
				iL	07 11 46	8	30		
				M		8	70		
345	26	G	Z	eP	19 02 26			36	
				S	07 44				
				eL	10 59				
				M		15	7		
				五 月		May			
346	6	G	E Z	(e)	12 01 56				微，近震。
				e	02 36				Very small local shock.
347	9	G	E Z	e(P)	11 25 52				55.5? 震中: Epc.: 41°N, 58°E,
				i	27 47				(USCGS).
				PP	28 04				
				(e)	32 45				
				S	33 14				
				(SS)	36 33				
				i(G)	38 36				
				R	42 00				
			E	M		14	32		
348	10 -11	G	N Z	eP	23 52 16			100	地面波小，震中在南非洲之東
				PP	56 25				海中。
				i	56 54				Surface wave small, epi-
				PPP	58 24				center off east coast of
				iSKS	00 02 57				South Africa.
				PS	05 13				
				(PPS)	06 23				
				PKKP	08 44				
				SS	10 45				
				iLQ	20 33				
				LR	25 47				
			N	M		20	5		
349	14	G	N Z	e	19 24 18				弱 Small
				e	28 19				
350	16	G	Z	iP	17 30 44	7	5	50	深源? Deep?
			N Z	e	31 04				震中: Epc.: 6°S, 151°E,
				i(pP)	31 23				(USCGS).
				e	31 51				
				(PP)	32 44				
				PPP	32 58				
				e	36 40				
				iS	38 00				
				ScS	40 44				



編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G. M. T. h m s	T	A	△	備註 Remarks
				SS	41 28				
				eLQ	43 04				
351	16	G	N Z	e	23 45 14				
352	17	G	N Z	i(P)	05 13 38				27.5? 強脈動干擾。
				(PP)	14 43				Beginning masked by
				e	18 11				strong microseism, sur-
				i(S)	18 21				face wave small.
			N	M		10	6		西安台: Record of Sian:
									P: 11 50 28
									(S): 53 29
353	17	G	N Z	iP	11 49 29				11? 紀錄不甚顯, 波週小。
				iS	51 32				Record faint, period
			N	M		short	30		shorter than usual.
									h=600 km (Pasadena).
354	17	G	N Z	e	17 55 01				一聯串地面波。
									Train of surface waves.
355	17	G	Z	iP	18 24 36	6	17	72	震中大概在新西蘭之北。
			N Z	i(PcP)	24 57				Epicenter north off
				i	25 06				New Zealand.
				i	26 28				
				iPP	27 15				
				i	32 23				
			N	iS	33 53	10	19		
			N Z	(SS)	38 24				
				e(G)	43 36				
			N	M		18	16		
356	19	G	Z	iP	02 49 36	7	12	73	地面波較小。
			N Z	i(PcP)	49 58				Surface wave small in
				iPP	52 16				comparison.
				iPPP	54 01				
				i	55 00				
				e	58 28				
			N	iS	58 53	11	32		
			N Z	(PS)	59 16				
			N	i(ScS)	59 31	8	9		
			N Z	(PPS)	59 40				
			N	iSS	03 31	15	15		
			N Z	eL?	13 54				
			N	M		21	11		
357	19	G	Z	iP	07 16 55	7	9	71	地面波小。
			N Z	PcP	17 13				Surface wave not clear.
				e	17 26				
				i	17 49				
			Z	ePP?	19 37	7	5		
			N Z	e	25 57				



編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T. h m s	T	A	△	備註 Remarks
			N	iS	07 26 12				
			N Z	e(PS)	26 35				
				e(ScS)	26 48				
				e(PPS)	27 02				
				e	29 50				
				i(SS)	30 33				
				e(L)	35 29				
			N	M		17	4		
358	21	G	N E	eL	08 54 24				脈動掩蔽。Masked by
			N	M		10	9		microseisms.
359	23	G	N E	e(L)	05 44 48				一串地面波。A train
			E	M		10	5		of surface waves.
360	23	G	N E	eL	07 43 56				
			E	M		12	8		
361	23	G	N E	e(P)	23 59 12				前部為脈動所蔽。
	-24			e(S)	00 00 56				Beginning masked by
				e(L)	01 28				microseisms.
362	25	G	N E	eL	09 07 17				
			E	M		12	9		
363	25	G	N E	e(P)	14 33 01				
			E	M			6		
364	25	G	N E	iP	18 41 06	5	3	28	
				i	41 35				
				iPP	42 05	6	14		
				(PPP)	42 25				
			N	iPcP	44 05	7	10		
			N	i	45 05	7	10		
			N	iS	45 43	10	19		
			E	iS	45 43	10	30		
			E	iLQ	47 35				
			N E	M		14	65		
365	26	G	N E	iP	01 28 27			74	
			N	iPcP	28 44	8	16		
			N	iPP	31 09	8	7		
			N E	PPP	32 38				
			N	iS	37 59	?	35		
			N E	i(PS, ScS)	38 30				
				i	39 49				
				SS?	42 46				
				i(G)	47 39				
			N	M		20	21		



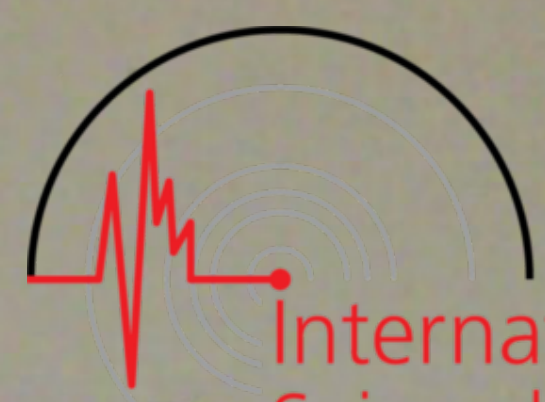
編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T. h m s	T	A	Δ	備註 Remarks
366	26	G	N E	P	14 40 27			32.5	地面波不顯。 No surface wave.
				PcP	43 08				
			N	iS	45 46	8	7		
367	27	G	N E	P	12 50 42			72	弱,地面波不顯。 Small, no surface wave.
			E	e(PP)?	53 16				
			N	iS	13 00 01				
			N	i(PPS,ScS)	00 49				
368	27	G	N E	P	14 38 13			70	弱,地面波不顯。 Small, no surface wave.
				(PP)	41 07				
			N	iS	47 21				
			N E	e	47 54				
				e	48 17				
				e(SS)	52 17				
369	28	G	N E	iP	01 48 07			71	地面波不明顯。 No clear surface wave.
			N	i	48 18	5	5		
			N E	PcP	48 27				
			N	iS	57 23	8	7		
			N E	i	57 53				
				i	58 05				
370	28	G	N E	eL	16 18 53				
371	29	G	N E	Pn	00 36 12			2.5ca	前部為脈動所蔽。 Beginning masked by microseisms.
				P*	36 14				
				Pg	36 19				
				Sn	36 41				
				S*	36 48				
				Sg	36 52				
			N	M		short	12		
372	30	G	N E	P	15 15 11			78	h=600 km. (Pasadena).
			E	e(pP)	17 25				
			N E	iPP	18 22				
				e	24 28				
			E	iS	24 33	8	5		
			N E	e	28 18				
				(SS)	28 50				
373	41	G	E	iP	13 15 41			11	
			N E	iS	17 44				
				i	19 03				
			E	M		12	120		

編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G. M. T. h m s	T	A	△	備註 Remarks	International Seismological Centre
					六 月	June				
374	2	G	N E	(e) P i i iS N M	19 58 25 58 30 58 48 59 19 59 26				5ca	
						short	25			
375	2	G	N E	e e(P) e (S) (L) N M	23 44 19 44 37 45 17 46 06 46 40				5ca	
						9	16			
376	3	W	N E	e e	07 59 02 59 28					
377	3	W	N E	e	08 49 19					
378	4	G	N E	e e	07 40 00 45 13				可能係複相地震。 Probably multiple shock.	
379	5	G	N E	e	05 51 04				微 Very small.	
380	5	G	N E	eL	09 04 35					
381	7	G	N E	iP i(PP) iS i	17 12 10 12 42 15 43 16 07			20	h=0.02 ?	
382	8	G	N E	i(P) i e(L)	16 30 03 35 10 17 20 02				全被強脈動掩蓋。 Completely masked by strong microseisms.	
383	10	G	N E	e i e	06 22 53 22 58 25 43				微 Very small.	
384	11	G	E E N E	eP iS iL M	03 39 51 41 46 41 59				10.5	
						?	25			



編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G. M. T. h m s	T	A	△	備註 Remarks
385	11	G	E N N E N	iP eS eL M	17 23 43 27 06 28 06	3 11	3 8	18.5	
386	11	G	N	e	21 29 59				微 Very small.
387	11	G		e e? e M	22 29 33 32 34 34 02				餘震 Probably after-shock of No. 385.
						11.5	4		
388	12	G	Z	iP i PP eS eG	14 19 11 19 39 21 20 26 48 32 57	3	3	54	地面波小 Surface wave small.
389	14	G	Z N N	iP i e e e	06 47 27 48 56 52 13 53 29 55 28				地面波不清楚 No clear surface wave.
390	15	G		e(P) e(S) e iR M	00 49 13 50 47 51 11 51 26			8?	
			N E			?	21		
391	17	G		e(P) e e(S) iR M	02 19 40 21 06 21 32 21 55			10?	
			N			?	17		
392	17	G		e iP iPP i i S iL M	22 41 50 41 54 42 29 42 45 43 25 45 33 46 05			20	
			E E E E E N N			6 6 6 7 6 14	4 3 6 5 3 20		
393	18	G		eL	07 03 19				

編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T. h m s	T	A	△
394	18	G		e(P)	12 50 25			23
				e(PP)	51 17			
			N	iS	54 31	9	4	
				iG	55 29			
			N	i	55 43			
			E	i	56 07			
			N E	M		12	40	
395	21	G		eL	04 35 18			
			N	M		11	5	
396	21	G		iP	07 07 02		63	
				iPcP	07 44			
				(PP)	09 25			
				(PPP)	10 37			
				(PcS)	11 27			
				iS	15 30			
				i	16 20			
				iSS	19 58			
				iG?	24 39			
				iR?	28 05			
			N	M		19	22	
397	21	G		e	10 04 05			44
			N	iP	04 09	7	5	
				iPP	05 44			
				iPPP	06 28			
			N	iS	10 37	11	19	
				i	11 30			
				i(SS)	14 04			
				(L)	15 31			
			N	M		18	37	
398	21	G	E	e(P)	11 53 38			8.5
				e	54 35			
				e	55 02			
				e(S)	55 16			
				(L)	55 33			
			N	M		?	42	
399	22	G	Z	Pn	07 28 05			2ca
				Pg	28 12			
				i	28 15			
				Sn	28 27			
				Sg	28 32			
				i	28 42			
				M		?	15	



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編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T. h m s	T	A	△	備註 Remarks
400	24	G	N E	iP	22 36 53	10	12	71	
				i(PcP)	37 11				
				i	38 04				
				PP	39 43				
				(PPP)	41 11				
			N	iS	46 08				
				i	46 49				
				(SS)	50 49				
				i	53 12				
			N	M		18	24		
			E	M		18	23		
401	25	G		P	11 11 42			27	
				i	12 56				
				i(PcP)	15 02				
			E	iS	16 21				
				iL	17 34				
			N E	M		18	22		
402	27	G	Z	iP	15 46 12	3	5	22	
			N	iP	46 12	?	8		
			Z	iPP	46 42	4	10		
			Z	iPPP	46 57				
			N E	iS ?	49 47	6	12		
			Z	iS	50 01				
			Z	(PcP)	50 24				
				eG	51 07				
				iR	51 52				
			Z	i	53 41				
			N E	M		16	108		
403	28	G		(P)	16 30 45				為脈動干擾
			N	e	35 33				Masked by microseisms.

李善邦 S.P.Lee
謝毓壽 Y.S.Hsieh
1950年9月20日
Sept. 20, 1950.

ACKNOWLEDGMENTS

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Apia.....	1949 Oct.-Dec., 1950 Jan.-Mar.
Beograd	1950 Mar.
Cleveland	1950 Mar. and Jun.
De Bilt	1949 Sept.-Dec., 1950 Feb.-Jul.
Dublin.....	1950 Jan.-Mar.
Hongkong	1949 Dec. and 1950 Jan.-Jul. (Extract of meteorological observations), 1950 Jan.-Jun. (monthly weather summary).
La Paz.....	1948 Jan.-Dec., 1949 Jan.-Jun.
Malaga	1949 Jul.-Nov.
Ottawa	1949 Mar.-Oct. W. G. Milne: Bibliography of Sismology, Nos. 4 and 5.
Pasadena	1949 Dec.-1950 Aug. (air mail), 1950 Jan.-Jul. (preliminary).
Perth	1949 Sept.-Dec., 1950 Jan.-Mar.
Roma	1950 Mar.-May.
San Miguel	1949 Apr.-Jun. (boletin mensual). A. J. Yriberri: Gradiente de Potencial Atmosferico Negativo con Cielo Despejado.
Stuttgart.....	1949 Jan.-Dec., 1950 Jan.-Mar.
Tokyo.....	1949 Apr.-Jul.
Toledo	1949 Jun.-Dec., 1950 Jan.-Mar., 1949 Sept.-Oct., 1950 Feb.-May (provisional).
Trieste	1950 Mar.-May (incomplete).
Uppsala.....	1948 Jul.-1949 Jun.
Wellington	1949 Jun. and Nov.-Dec., 1946 (supplement).
Zagreb	1949 Jan.-Jun.

地震紀錄報告

請 交 換

FOR EXCHANGE

一九五〇年七月至十二月

SEISMOGRAPHIC REPORT

JULY-DECEMBER, 1950.

Published by

ACADEMIA SINICA

中國科學院地球物理研究所

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Institute of Geophysics and Meteorology,

1 Chi-Ming-Sze, Nanking 5, China.

地震紀錄報告

南京水晶台

一九五〇年七月至十二月

SEISMOGRAPHIC REPORT

Shuitsingtai Seismic Station,

Nanking, China.

Jul-Dec., 1950.

位置：

Location λ : $118^{\circ} 47.9' E$, ϕ : $32^{\circ} 02.8' N$, h : 7 m.

儀器：

Instruments

I. 加利清魏利浦式地震儀，垂直，南北，東西向各一架。

Galitzin-Wilip, Z-comp., NS-comp., and EW-comp. each.

II. 自製 I- 式 100 公斤水平擺地震儀，南北及東西向各一架。

Self-made I-type 100-kg. Horizontal Pendulum, NS-comp. and EW-comp. each.

III. 維開式地震儀，200 公斤水平式一架，80 公斤垂直式一架。

Wiechert, 200-kg. Horizontal, 80-kg. Vertical each.

震儀常數：

Constants

I

	Component	T_0	T_1	μ^2	K	A	l
		sec.	sec.			cm.	cm.
due May 7,	N	10.7	11.7	+0.244	189.5	112	11.26
1951.	E	10.7	9.7	+0.081	196.2	110	11.19
1951年5月7日定	Z	6.3	3.3	+0.567	464.9	96	14.68

II

		T_0	V_0	ε_0	r/T_0^2
		sec.			
due May 11,	N	4.0	140	1.047	0.00152
1951.	E	4.2	140	1.070	0.00255
1951年5月11日定					

III

due May 14,	N	1.8	130	1.032	0.00841
1951.	E	1.8	117	1.115	0.02915
1951年5月14日定	Z	1.8	99	1.090	0.00438

簡寫說明：

Abbreviations

G = 加利清魏利浦式紀錄 Record from Galitzin-Wilip.

I = I-式紀錄

Record from I-type.

W = 維開式紀錄

Record from Wiechert.

T = 地面震動週期

Period of earth movement, in second.

A = 未核算之雙震幅

Unreduced double amplitude, in millimeter.

Δ = 震中距離

Distance from epicenter, in degree.



編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T	A	△	備註 Remarks
					h.	m.	s.	sec.	mm.	deg.	
七月 JULY											
404	2	G	E	e(L)	05	57	39				
405	2	G	E	(e)	09	58	41				
				e(L)	10	04	53				
				M				8	6		
406	3	G		(e)	04	49	50				弱, 近震.
				e(S,L)		51	20				Small, local.
407	3	G		iP?	10	09	09			25	記時器發生障礙.
			Z	PP		09	34				Time-mark failed.
				i		10	01				
			N	iS		13	28				
				L		14	15				
			N	M				20	78		
			E	M				20	70		
408	7	G		P?	16	56	19			45	記時器發生障礙.
				eS	17	04	29				Time-mark failed.
			E	M				19	9		地面波弱.
											Surface waves small.
409	8	G		e(L)	11	56	41				
410	9	G	Z	-iP	04	58	48	4	7		震中在南美洲.
				i		59	18	4	19		Epc: S. America.
				i(pP', P ₂ ')	05	01	18	4?	8		
				i		01	55				
				isP'		02	54	5	16		
		G	Z	-i(P')	05	08	50				餘震?
				i		09	20				After-shock?
				i(pP')		11	20				
				i(sP')		12	53				
411	9	G		-i(P')	10	03	50				第410之餘震?
				i		04	15				After-shock of No. 410?
				i(pP')		06	17				
				i(sP')		07	53				
412	9	G	Z	P	16	17	30			39	
			EZ	ipP		18	17				

編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	△ deg.	備註 Remarks
		G	EZ	isP	16	18	42				
			Z	PP,(PcP)	19	21					
			Z	i	20	15					
			E	iS	23	12	11	26			
			NE	i(sS)	24	25					
			N	i(G)	26	20					
			E	M			18	15			
413	12	G	E	(e)	11	11	17				
			N	i	16	57					
			N	i	26	39	13	7			
			N	M			20	7			
414	12	G	E	e(L)	16	03	06				
415	13	GI		-iP	04	07	42				20ca. 震中在馬利亞納羣島.
			N	i(pP)	08	28					Epc: Marianas Is.
			NE	iS	10	44					無清晰之地面波.
			N	i(G)	12	04					No clear surface waves.
			N	M			13	37			
416	18	G		+iP	16	30	54				26 脈動干擾.
				i(pP)	31	45					Masked by microseisms.
				iS	35	07	10	15			h=0.03.
417	21	G		-iP	20	43	01				69 強脈動.
			Z	i	43	35					Strong microseisms.
			Z	ipP	43	52					h=0.03.
			Z	isP	44	13					
			Z	i	44	53					
			Z	i(PP)	45	35					
			NE	iS	51	43					
			NE	i(SS)	53	03					
418	22	G		iP?	23	18	38				67 Dilatation from NW.
				i	18	52					
			Z	i(pP)	19	47					
			Z	i(PP)	21	12					
			NE	i(S)	27	14					
419	23	G		+iP	16	01	02				脈動干擾.
											Masked by microseisms.



編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	Δ deg.	備註 Remarks			
					h.	m.	s.							
420	29	G		+iP	16	52	13			30	Compression from NE.			
			Z	i		52	22	3	8					
				i(pP)		52	38							
				i(sP)		52	49							
				iPP		53	09							
			N	iS		57	02	10?	56					
			E	M				10?	40					
421	29-30	G		iP	23	58	08				Compression from SE. 地面波弱。 Surface waves small.			
			Z	i		58	28	3	7					
				i		58	59							
				PP	00	00	03							
			E	iS		05	25	13	20					
				iScS		08	01							
			N	G		10.2								
			E	R		11.6								
			N	M				16	18					
								八月		AUGUST				
			422	1	G		P	09	16	42				25
	i					16	53							
	PP					17	24							
E	iS					21	01	14	15					
	G					21	59							
	R					22	51							
E	M							14	50					
423	2	G		P ₁	10	56	18			22	可能係兩個地震。 Probably two shocks.			
				iP ₂		57	17							
			E	(S) ₁	11	00	02							
			E	i		00	52							
			NE	(S) ₂		01	14							
				(L)		02	34							
			E	M				16	16					
424	2	G	Z	-iP	14	01	28	3	3	75ca.				
				iPP		04	11							
			E	(S)		11	01							
			E	SS		15	58							



編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	Δ deg.	備註 Remarks
					h.	m.	s.				
425	3	G		eP	15	33	55			25ca.	
				(S)		38	18				
				R		40	20				
			E	M				12	5		
426	3	G		e	22	40	22				極遠.
				e(L)	23	25.4					Very distant shock.
			E	M ₁		34.6		23	5		
			E	M ₂		40.8		23	5		
427	5		N	iP	09	29	57	5	7	100ca.	
			E	i		31	09				
			N	iPP		33	31	5	13		
			E	iSKS		40	52	10	12		
				S		41	56				
				PKKP		46	55				
				L		53.8					
			N	M				30	18		
428	5	G		e	11	33	55			10	
			E	e(S)		35	13				
			N	iS		35	49				
			N	M				21	44		
429	7	G	Z	+iP	02	50	27	3	24	26	Compression from SE.
			Z	PP		50	56				
			Z	i		53	31	3	35		
		W	Z	i		54	12				
		G	NE	S		54	55				
		G	N	M				10	90		
430	7	G		-P	15	53	50			26	地面波弱.
			Z	i		54	11				Surface waves small.
			Z	i		54	22				
				S		59	01				
				LQ	16	01.5					
431	9	G		(e)	03	28	12			1ca.	弱. Small.
				e(S)		28	24				
432	10	G		e	19	28	46				



編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A min.	△ deg.	備註 Remarks
			N	e	30	09					
			N	M			10	5			
433	14	G		e(L)	08	46	50				
434	14	G		+iP ₁ '	23	10	26				Epe: Near antipole.
			Z	e	11	05					
				iP ₂ '	12	07					
			Z	i	12	47					
				iPKS	14	20					
				iPP	15	58					
				i	18	13					
435	15	G		+iP	14	13	58				20ca. 震幅極大. Offscale.
		W		iS	17	40					Compression from SW.
436	15	G		+iP	18	43	21				20ca. 震中在印度東北部.
				S	47	07					Epc: Northeast India.
437	15	G		iP	21	06	03				20ca.
				S	09	47					
			E	i	12	23	5	8			
438	15	G		(e)	21	43	54				20ca.
				e(S)	47	29					
				i	51	44					Probably S of another shock.
439	15	G	Z	+iP	23	49	25	3	4		
				e	52	31					
				e(S)	53	26					
				L	54	35					
440	16	G		(e)	04	30	06				9ca.
				S	31	48					
				iL	31	56					
				e	36	09					Probably S of another shock.
441	16	G	Z	+iP	05	37	37	3	8	19ca.	
				S	41	07					
				eG	42	26					
			N	M				10	75		
			E	M				10	45		

編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	Δ deg.
					h.	m.	s.			
442	16	G		P	06	46	36	3	17	21ca.
				i		46	40			
			Z	i(PP)		46	52			
			E	iS		50	26			
				iPcP		51	13			
				iL		52	13			
			N	M				10	110	
			E	M				10	80	
443	16	G	E	(e)	11	01	28			弱, 近震.
				i(L)		01	44			Small, local.
444	16	G		+P	11	33	09			20ca. Compression from SW.
				S		36	52			
			N	M				10	25	
			E	M				10	15	
445	16	G	E	e	12	47	41			18ca.
				(S)		50	56			
				eL		51	44			
446	16	G		+P	15	22	26			
				(eS)		26	28			
447	16	G		P	15	34	07			21
				S		38	00			
			E	L		39	22			
			N	M				10	56	
			E	M				8	38	
448	16	G		-P	16	40	42			21
			E	S		44	35			
			N	e(L)		46.4				
			N	M				7	30	
449	16	G		+P	17	56	38			23
			Z	iPP		57	18			
			N	iS	18	00	47	7	20	
				iG		01	37			
			N	M				10	40	
			E	M				10	20	
450	16	G		+P	19	30	16			19.5

備

Remarks

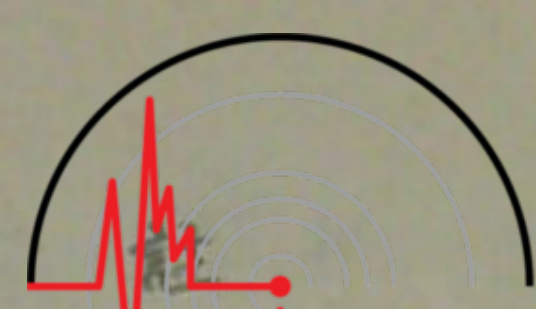
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編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	Δ deg.	備註 Remarks
					h.	m.	s.				
				S	33	50					
				eL	35	21					
			N	M				8	26		
			E	M				8	12		
451	16	G		eP	20	15	38			21	
				iP		15	46				
			Z	i		17	22				
				iS		19	29				
			E	G		20	28				
				eL		21	01				
			N	M				8	15		
			E	M				8	18		
452	16	G		P	21	48	58			22	
			E	S		52	56				
			E	eL		54	10				
			N	M				6?	10		
453	16	G		+P	23	25	54			20	
				iPP		26	20				
				i		26	56				
			E	e		29	23				
			N	iS		29	36				
			N	i(PcP)		30	31				
			N	eL		31	05				
			N	M				8	20		
			E	M				8	30		
454	17	G	Z	+iP	01	58	57	3	10	21	Compression from SW.
				iPP		59	39				
				(PPP)		59	55				
			Z	i	02	00	48				
			N	iS		02	46	6	20		
			N	G,(PcP)		03	54				
				e(L)		04	10				
			N	M				8	100		
			E	N				8	55		
455	17	G	Z	+i(P)	05	34	00			21	爲餘波所蔽.
			N	iS		37	52	7	20		Masked by coda.

編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	△ deg.
					h.	m.	s.			

備

Remarks

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			E	iG	38	23				
			N	M			8	60		
			E	M			8	50		
456	17	G	EZ	e	14	48	40			
			NE	(eS)	52	34				
				eL	54	35				
			N	M			9	12		
			E	M			9	8		
457	17	G	Z	-iP	16	26	33	2	6	71
				i	27	23				地面波弱.
				e(pP)	28	17				Surface waves small.
			Z	i	28	51				
			Z	i	29	02				
			EZ	i	29	37				
			EZ	(PP,sP)	29	49				
			N	iS	35	50	7	14		
			E	(SS)	40	53				
			N	G	44.8					
458	18	G		P?	01	12	13			換紙.
			E	S	16	04	5	45		Paper just on.
			N	M			7	110		
459	18	G	Z	(e)	11	25	06			脈動干擾.
			E	(S)	28	53				Masked by microseisms.
			N	eL?	30	43				
			E	M			8	12		
460	18	G	Z	-iP	17	03	14	3	14	20
				i	03	47				
			N	iS	06	48	5	20		
				L	08	03				
			N	M			10	85		
			E	M			8	55		
461	18	G	EZ	eP	22	22	21			21
			E	S	26	10				
			N	M			10	84		
462	20	G		e	09	08	16			21



編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	Δ deg.	備註 Remarks
					h.	m.	s.				
				P	08	20					
			Z	i	08	24					
			E	iS	12	08		8	25		
				G	13	01					
			N	M				10	82		
			E	M				10	60		
463	21	G		P	05	56	03			19.5	紀錄微弱，餘波干擾。 Record faint, masked by previous coda.
				eS		59	37				
				L	06	00	43				
			N	M				—	40		
464	21	G		P	08	34	51			24	
				i		34	57				
			E	(PcP)		37	04				
			E	S		39	04				
				L		41	09				
			N	M				10	48		
			E	M				10	44		
465	21	G		+iP	18	48	29			22	
				S		52	23				
				eL		54	00				
				R		54	55				
			N	M				8	20		
			E	M				8	19		
466	21	G		eP	23	00	25			22	餘震。 After-shock of above.
				S		04	21				
			N	eL		05	47				
467	22	G		+P	02	01	49			21	
			Z	i		01	52				
				S		05	36				
				eL		06	59				
			E	M				10	22		
468	22	G	E	P	02	27	12	3	13	21	
				e(S)		30	37				
			E	iS		31	00				
				iL		32	21				
			N	M				8	100		

編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec	A mm.	△ deg.
			E	M				6	65	
469	22	G		+iP	06	47	56			21
			N	iS		51	45	7	21	
			N	G		52	44			
			N	M				8	75	
			E	M				8	30	
470	22	G		eP	13	26	49			20
				i		26	54			
			Z	i		27	14			
			N	iS		30	30			
			N	i(G)		31	18			
			N	M				10	100	
			E	M				10	60	
471	23	G		+P	03	14	00		21	
			Z	i		14	11			
			Z	i		15	37			
			N	e(S)		17	44			
			E	iS		17	53			
			N	iS		17	55	6	18	
				G		18	32			
				(R)		19	19			
			N	M				8	110	
			E	M				8	57	
472	23	G	E	P	15	38	31			20
				iS		42	10			
				L		43	46			
			N	M				8	50	
			E	M				8	15	
473	23	G		+iP	18	51	31			20
				PP		51	48			
			E	eS		55	03			
			N	iS		55	09			
				iG		55	47			
			N	M				6	50	
			E	M				6	25	
474	24	G		eP	01	32	18			21ca

備註
Remarks



編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	△ deg.
					h.	m.	s.			
			Z	i	32	22				
				iS	36	04				
				i G)	36	48				
			N	M				8	65	
			E	M				8	40	
475	25	G		eP	08	18	50			22
			E	eS		22	47			
				eL		24	02			
			N	M				9	18	
			E	M				9	13	
476	26	G	NE	e(P)	03	52	35			
				eL		59.0				
			N	M				10	11	
			E	M				10	9	
477	26	G		e	04	57	06			42
				e(S)	05	03	20			
				eQ		06	11			
			N	M				12	46	
			E	M				12	30	
478	26	G		e	06	37	51			22
				iP		37	57			
				iS?		41	47			
				iL		43	12			
			N	M				10	120	
			E	M				10	103	
479	26	G	E	(e)	13	38	58			
			E	e(S)		42	37			
			N	e(R)		44	37			
			N	M				10	20	
			E	M				10	9	
480	27	G		-P	11	04	45			23
			N	iS		08	51			
				(R)		11	08			
			N	M				8	19	
			E	M				8	5	

記時號不清楚。
Time mark not clear.

編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T	A	△
					h.	m.	s.	sec.	mm.	deg.

備
Remarks



481	29	G		(e)	17	55	29			
			N	e	18	01	20			
				eL		03	42			
			N	M				14	11	
			E	M				14	7	

482	29	G		e	22	40	28			
				e		46	02			
			N	M				15	13	
			E	M				15	7	

483	30	G		+iP	06	58	14			36	Compression from SSE.
			Z	i		58	25				地面波弱.
			Z	i		58	45				Surface waves compar-
			Z	i		59	29				atively small.
			E	S	07	03	19	4	9		
				i		03	54				
				G		05	04				
			N	M				10	12		
			E	M				10	10		

484	31	G		eP	07	11	23			28	
				i		11	28				
			E	i		15	41				
				iS		16	04				
			E	M				10	85		

485	31	G		+P	19	57	12			21	Compression from SE.
				eS	20	00	58				
			N	iR		02	48				
			N	M				10	25		
			E	M				10	24		

九 月 SEPTEMBER

486	1	G		+iP	02	55	17			46	Compression from SW.
				(PP)?		57	00				記分號有障礙.
				(PPP)?		57	56				Minute mark failed.
				eS	03	01	33				
			N	i		02	00	8	7		
				(SS)		05	38				
				eL		07.9					

編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	Δ deg.	備註 Remarks
					h.	m.	s.				
			N	M				17	15		
			E	M				19	9		
487	1	G		-P	07	16	37			21	Dilatation from NE.
				S		20	28				
				i(G)		21	07				
				iR		22	38				
			N	M				9	22		
			E	M				11	20		
488	1	G		P	07	37	24			21	餘震.
			E	eS		41	10				After-shock of above.
489	1	G	E	eP	23	49	18			23?	
				(eS)		53	16				
				eR		55	21				
			N	M				7	12		
490	2	G		+iP	02	56	40			54	Compression from NE.
				i	03	01	43				
				S		04	15				
			N	e(ScS)		06	26				
				eL		11.7					
			N	M				17	10		
491	2	G	E	-iP	16	19	03	4	15	20	Dilatation from NWW.
				i		19	19				
				iPP		19	24				
				iPPP		19	34				
				iS		22	39				
				(G)		23	02				
				(PcP)		23	14				
				iR		23	52				
			N	M				9	100		
			E	M				10	110		
492	3	G		P	23	35	23				
				eS		39	12				
			N	eL		41	00				
493	4	G		+iP	06	23	32				
				i		23	44				



編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	△ deg.	備 Remarks
					h.	m.	s.				
			E	eS	27	14					
			E	eL	28	30					
			N	M				7	20		
			E	M				7	10		
494	4	G		+eP	08	16	59			20	
				ePP		17	30				
				eS		20	39				
				eL		21	45				
			N	M				10	25		
			E	M				10	17		
495	4	G		eL	22	38	36				一串地面波. A train of surface waves.
496	5	G		eL	08	44	07				
497	8	G		eL	22	08	54				
498	9	G		+iP	10	30	22				49ca. 地面波較弱
				PcP		31	50				Surface waves compara-
				(PcS)		35	26				tively small.
			N	iS		37	23	7	30		
				(SS)		40	14				
				i(G)		42	59				
				i		43	41				
			N	M				18	34		
499	10	G	Z	P	03	25	38			18ca.	
			NZ	i		25	53				
			NZ	i		25	59				
				iS		29	01				
			N	M				5	42		
500	10	G	NZ	(e)	10	35	05				
				e(S)		38	49				
				eL		40.6					
			N	M				15	20		
			E	M				14	10		
501	10	G	Z	-P	15	26	44			60	Dilatation from SE.
				+iP		26	47	4	13		
			Z	i		27	06				

編號 日期 震儀 分 向 震相 到達時刻
No. Date Instr. Comp. Phase G.M.T.
h. m. s. T sec. A mm. Δ deg.

備
Remarks



				PcP	27	18			
			Z	i	27	40			
			Z	e(PP)	28	52			
				i	29	19			
			Z	PPP	29	53			
			N	eS	34	57			
				iPPS	35	22			
				i(G)	41	—			
			N	M			17	32	
502	11	G		-P	00	23	14		
503	11	G		-P	09	44	39		22
				S		48	33		
				G		49	12		
				R		50	34		
			N	M				9	26
			E	M				9	11
504	12	G		eL	03	59.5			
			N	M			15	7	
505	12	G		eL	20	41.6			
			N	M			13	7	
506	13	G	Z	-P	00	06	53	3	5
				i		07	15		
			Z	i		07	47		
				S		09	59		
				i		10	12		
				L		10	42		
			N	M			short	100	
			E	M			short	72	
507	13	G		+P	11	12	24		21
			N	iS		16	13		
				iL		17	23		
			N	M				10	80
			E	M				10	35

因換紙,其他震相未記下。
The rest missed when
changing the recording
paper.

一串地面波。
A train of surface waves.
一串地面波。
A train of surface waves.



備

Remarks

International
Seismological
Centre

編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	Δ deg.
					h.	m.	s.			
508	13	G		e?	15	48	55			
			N	M				9	10	
			E	M				9	8	
509	14	G		P	02	36	18			24
			E	e(S)		40	31			
				e(L)		42.7				
			N	M				8	7	
510	14	G		e(P)	09	12	08			35ca. 地面波不顯著.
				S		17	36			Surface waves not well
				(G)		19	26			developed.
511	15	G		(P)	08	47	35			
			N	(eS)		49	01			
			N	i		49	09			
			N	M				short	5	
512	16	G		+iP?	12	52	23			記時器發生障礙.
				S?		54	33			Time-mark failed.
				L?		55.0				
513	16	G		-iP?	22	05	57			Dilatation from NE.
				S?		07	52			記時器發生障礙.
514	17	G								Time-mark failed.
				eP	16	00	46			21
				S		04	36			
				e(G)		05	33			
			N	M				9	15	
515	17	G	E	M				9	10	
				eP	21	02	42			24
				S		06	56			
			N	e(G)		07.8				
			N	M				9	10	
516	17	G	E	M				8	5	
				e	21	38	07			
				e S)		42	10			
				eL		43	07			
			N	M				9	8	
517	18	G		eP	19	11	40			23

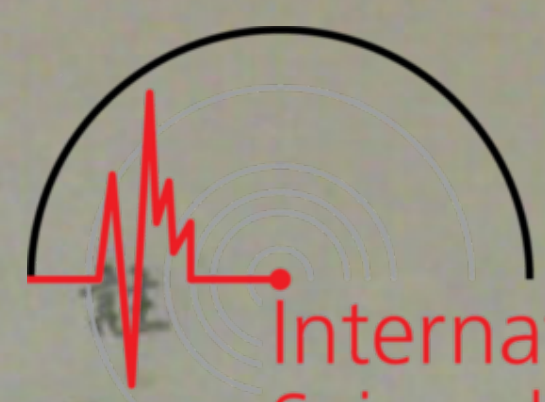


編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	△ deg.	備註 Remarks
					h.	m.	s.				
518	19	G	N E Z	S	15	48					
				eL	16.8						
				M				7	22		
				M				7	17		
				+iP	20	37	12			39	Compression from SE.
				i		37	14	4	12		
				PP		38	46				
				iS		43	10				
				i		44	57				
				i(SS)		45	23				
				iG		45.8					
				M				18	82		
519	21	G	N	M	16	20.7		8	14		
				eL							
520	21	G	Z	P	23	01	42			65	
				i		04	13				
				eS		10	19				
				i(ScS)		11	36				
				e		14	20				
				M				11?	4		
521	23	G	Z	-P	00	04	49			68ca.	深源.
				iP		04	53	3	21		Deep-focus, h: 0.06.
				i		05	07				
				ipP		06	12				
				i(PP)		07	29				
			Z E	e		10	22				
				i		13	16				
				iPS		14	17	6	15		
				i		16	48				
				(e)	13	37	50				微.
522	23	G	Z	e		39	34				Very small.
				P	18	30	21			26ca.	前震.
523	23	G		e(S)		34	35				Fore-shock of No. 524.
				iP	18	43	52	3	6	26ca.	Compression from SSE.
524	23	G	Z								



編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T. h. m. s.			T sec.	A mm.	△ deg.	備註 Remarks
				(PP)	44	25					深源. Deep-focus, h: 0.04.
				pP	44	47					
				iS	48	06					
				(G)	48.7						
525	24	G		+P	23	05	24				
			E	eL		21.9					
			E	M				12	6		
526	25	G		iP?	23	21	02				Compression from SE.
				i(pP)?		21	58				記時器發生障礙.
				i?		22	33				Time-mark failed.
				iS?		25	29				
527	26	G		(e)	02	39	02				
				i(L)		41	48				繼以地面波.
				(e)		44	35				Followed by surface
				i		45	24				waves.
繼以約十二個微弱地震. About 12 smaller shocks followed.											
528	26	G		(e)	12	47	37				
				e		48	44				
				i(L)		49	16				
			E	M				7	12		
529	26	G		e	14	12	02				起始微.
				eL		15.1					Initial very small.
			E	M				9	27		
繼以約五個微弱地震. About 5 smaller shocks followed.											
530	26	G		e(L)	19	08	13				起始微.
				i		09	34				Initial very small
				i(L)		09.9					
			E	M				8?	40		
			Z	M				6?	20		
531	26	G		eL	21	07	00				
			E	M				8	15		
532	27	G		eL	01	10.2					
			E	M				short	11		

編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	Δ deg.	備 Remarks
					h.	m.	s.				
533	27	G		e(L)	08	21.7					
			E	M				4	5		
534	27	G		e(L)	10	54	00				
			E	M				7	7		
535	27	G		i(P)	11	59	40				
				i(L)	12	01	56				
			E	M				4	6		
536	27	G		(e)	12	48	11				
				(S)		49	30				
			E	M				8	28		
537	27	G		eL	15	38.4					
			E	M				4	5		
538	27	G		e(L)	16	59.1					
			E	M				5	5		
539	27	G		(e)	17	16	17				
				iL		16	53				
			E	M				5?	15		
540	27	G		e(L)	22	06.4					微。
			E	M				8?	5		Very small.
541	27	G		i(L)	22	42.4					
				eL	22	50.6					另一地震?
											Of another shock?
542	28	G		P	03	31	53			9	
			E	i		32	02				
			E	i		32	26				
				iS		33	37				
			N	M				6	65		
			E	M				6	62		
543	28	G	E	e(L)	06	53.1					
			E	M				8	6		
544	28	G		eL	08	28.2					
			E	M				8	10		
545	28	G		eL	11	12.8					
			E	M				8	7		



編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	Δ deg.	備 Remarks
					h.	m.	s.				
546	28	G		eL	11	29.5					
			E	M				7	5		
547	28	G	E	eL	13	48.9					
			E	M				8	7		
548	28	G		eL	14	00.3					
			E	M				7	5		
549	28	G	E	(e)	16	38	40				
			E	i		39	14				
				i		42	39				
			N	M				8	6		
			E	M				8	20		
550	28	G		eL	21	28.1					
			E	M				7	14		
551	29	G		eL	02	36	41				
				i		37	23				
			E	M				8	19		
552	29	G		eL	09	23.4					
				(i)		24	30				
			E	M				7?	6		
553	29	G		eL	13	38.7					
				i		39	04				
			E	M				8	5		
554	29	G		eL	14	25.7					
			E	i		26	30				
			E	M				8	21		
555	29	G		iL	15	22	22				
556	29	G		iL	15	58	48				
			E	M				8	4		
557	29	G	E	e(L)	21	49	54				
			E	i		50	55				
			E	M				6	5		
558	29	G		eL	22	23	39				
			E	i		25	05				
			E	M				?	40		

編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	△ deg.	備註 Remarks
559	30	G		e	00	09	55				
				i		10	34				
			E	M				8	5		
560	30	G		e(L)	04	23.5					記時器發生障礙。
				(i)		23	52				Time-mark failed.
			E	M				7	8		
561	30	G		e(L)	05	49	04				
				i		50	04				
			E	M				8	20		
562	30	G	Z	+iP	07	33	44	3	20		22ca. Compression from SW.
			E	i		34	46				
				S		37	38				
				iG		38	26				
				iR		38	59				
			E	M				7	69		
563	30	G	E	e(L)	12	08	14				
			E	i		08	50				
			E	M				7	5		
564	30	G	E	eL	14	33	39				
			E	i		34	11				
			E	M				7	10		
565	30	G	E	L	18	41	48				
			E	M				?	5		
566	30	G	E	e	19	16	00				
				i		16	38				
			N	M				3	6		
			E	M				3	9		
					十月 OCTOBER						
567	1	G	E	e	00	07	44				微。
			E	i		07	58				Very small.
568	1	G	E	e(L)	02	12	45				
				i		13	49				
			E	M				7	5		



編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	Δ deg.
					h.	m.	s.			
569	1	G	E	e(L) i E M	06	10	04 45	8	6	
570	1	G	E	e(L) E e E i E M E i E M	12	55	25 31 03	8	7	
					13	03	51	8	5	另一地震? Of another shock?
571	1	G		e(L) E (e) i E M	16	53	57 31 08	7	6	
572	1	G	E	eL i E M	19	06	41 19	7	17	
573	2	G		(e) i E M	00	39	08 05	4	6	
574	2	G		e i N e E M	07	01	49 07 02	8	6	
575	2	G	E	e i E M	08	33	09 38	7?	4	
576	2	G		e i E M	08	47	47 54	7	6	
577	2	G		e(L) E M	11	57.9		7?	5	
578	2	G		(e) i E M	17	10	18 53	8	10	

編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	Δ deg.	備註 Remarks
					h.	m.	s.				
579	3	G	E	(e)	02	33	15				
				i		34	20				
				M				8	16		
580	3	G	N	(e)	06	22	07				
				i		23	06				
			N	i		24	06				
			E	M				9	33		
581	3	G	N	i(L)	23	12	20				強脈動干擾.
			N	M				8	47		Masked by strong
			E	M				9	35		microseisms.
582	5	I	N	i	16	32	12	6	5		
				e(L)		50	09				
			N	M				23	2		
583	5	G	Z	(e)	19	13	11				
			Z	i		14	08				
584	6	G		eL	12	38	57				
			E	i		39	53				
			E	M				8	13		
585	7	G	E	e	01	31	22				近震.
				iL		31	45				Local.
			E	M				3	7		
586	7	G	Z	(e)?	21	32	48				記時器發生障礙.
				eL?		33	13				Time-mark failed.
			E	M				?	12		
			Z	M				?	8		
587	7	G	Z	(e)?	22	28	28			4	記時器發生障礙.
				S?		29	27				Time-mark failed.
				i?		29	49				
			E	M				7	38		
			Z	M				7	22		
588	8	G	E	(e)	02	03	25				
				i(L)		04	09				
			Z	M				3?	8		
589	8	G		+iP	03	30	22			38	Compression from SE.

編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T	A	Δ
					h.	m.	s.	sec.	mm.	deg.

備註
Remarks

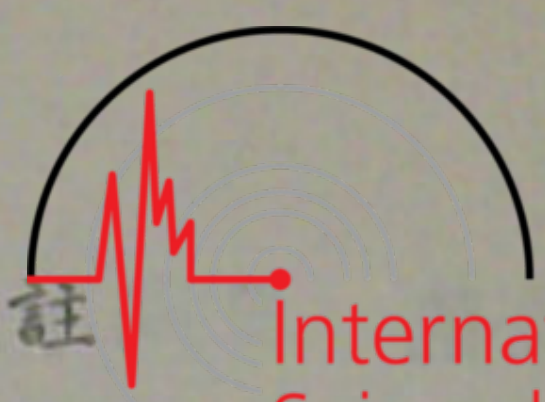


			Z	i?	31	12				
			N	(PP)	31	58				
			N	iS	36	16				
			N	(G)	38	54				
			N	i	41	19				
			N	M				13	22	
			E	M				11?	100	
590	8	G	Z	+iP	04	55	05			
			Z	i		59	19			
				i	05	01	23			
591	8	G	E	e	09	00	15			
592	8	G	Z	+P	14	58	28			49
			E	e(S)	15	05	34			
			E	e(L)		09.6				
			E	M				18	5	
593	8	G		e(L)	16	25.3				
				i		26	00			
			E	M				8	10	
			E	i		44	12			另一地震?
			E	M				?	7	Of another shock?
594	10	G		(e)?	05	08	42			記時器發生障礙.
				i?		09	14			Time-mark failed.
				i?		09	23			
			E	M				6	7	
595	10	G	E	eL	11	11	35			
			E	i		12	25			
			E	M				9	14	
596	10	G	E	eL?	16	57	14			記時器發生障礙.
			E	M				7	5	Time-mark failed.
597	12	G	N	(e)?	07	54	09			記時器發生障礙.
				i?		54	31			Time-mark failed.
			E	M				—	3	
598	12	G	Z	i(P)	23	56	45			

編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	Δ deg.	備 Remarks
					h.	m.	s.				
599	15	G	Z	+P	16	09	43	3	5		60ca. Compression from SE. 深源. Deep-focus, h: 0.025 ca.
			Z	ipP		10	27				
			E	PP		11	47				
			E	iS		17	39	7	7		
			E	PS		17	54				
600	16	G	ZE	-P	15	47	14			20	
				i		47	58				
			E	S		50	59				
			E	M				5	10		
601	19	G	E	(e)	09	31	22				
				i		31	47				
			E	M				7?	5		
602	20	G	N	P	00	15	35			11	
			NE	(S)		17	15				
				i(L)		17	40				
			E	M				7	25		
603	21	G	NZ	+i(P)	04	25	14				
			E	e		28	44				
			E	M				8	6		
604	21	G		e(P)	09	57	28				近震.
				i		57	33				Local.
				i		57	54				
605	23	G	Z	e(P)	16	32	24				極遠.
			Z	(P')		34	18				Very distant shock.
			E	e		42	17				記錄連續二小時.
				e		51	34				Wave recording
			E	M				8	37		continued for two hours.
606	25	G	E	-iP	07	05	25	3?	10	6.5	
			E	e(S)		06	40				
			E	iL		06	52				
			E	M				-	34		
607	26	G	Z	(e)	19	44	48				
				i		45	07				
			E	M				5	4		



編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	△ deg.	備註 Remarks
					h.	m.	s.				
608	27	G	E	(e)	16	59	57				
				i	17	00	47				
			E	M				5	6		
609	29	G	Z	+P	01	04	11			19	
			E	e(S)		07	42				
			E	eL		08	51				
			E	M				10?	6		
610	29	G	Z	+P	06	07	15			21	
			E	e(S)		10	56				
				eL		12.5					
			E	M				8	14		
611	30	G	Z	e(P)	09	09	29			20ca.	
			E	e(S)		13	11				
			E	e(L)		15	05				
			E	M				9	16		
612	30	G		eL	23	24	16				
			E	M				8	12		
十一月					NOVEMBER						
613	1	G	E	eL	05	07	47				
			N	M				11	17		
			E	M				11	10		
614	2	G	Z	P	07	09	33			8	
			E	iS		11	06				
			Z	iL		11	21	2	4		
			Z	M				4	60		
615	2	G		+iP	15	35	29	?	40	38	Compression from SE.
		I	E	iS		41	19	4	10		
		G	E	M				—	60		
			Z	M				5?	50		
616	2	G	Z	i(P)	18	21	44	2	4		
			Z	i		22	15				
			Z	i		30	05				另一地震?
			Z	i		33	15				Of another shock?



編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	△ deg.	備註 Remarks			
					h.	m.	s.							
617	2	G	Z	-iP	20	21	47			19				
				NE								eS	25	18
				(L)									26	40
			N	M			8	18						
				E	M			8	22					
618	3	G	NE	e		08	28	45			微. Very small.			
				i								30	03	
619	3	G	Z	P	10	42	31			16				
				e(S)								45	34	
				(L)								46	32	
			E	M		13?	6							
620	5	G		+P	17	40	41			14				
				S								43	18	
				(L)								44	00	
			Z	M		8	60							
621	6	G	EZ	+iP	22	31	25			53	Compression from SE. 地面波弱. Surface waves small.			
				N								S	38	54
				E								(PS)	39	08
622	8	G	Z	+P	02	28	00	3	4	57	Compression from SE. 地面波弱. Surface waves small.			
				Z								i	28	41
				PP								30	10	
			E	S	35	56	8	33						
				(G)	42	00								
			E	M		11	14							
623	9	G		P	02	52	18							
				N								e	55	49
				i								57	53	
624	9	G		iP	12	00	41							
				i								01	29	
625	12	G	Z	P	21	35	19							
				NE								e(L)	41	22
				E								M		8
626	15	G	Z	e	08	03	56	5	2					
				e(L)								07	52	

編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	Δ deg.	備 Remarks
					h.	m.	s.				
			E	M				7	5		
627	16	G	Z	e	05	31	52				
			N	e(S)		36	08				
			E	M				12?	3		
628	16	G	Z	(e)	09	13	44				
			E	e(S)		17	25				
				e(L)		18.9					
			N	M				11	12		
			E	M				11	21		
629	18	I		e	23	12	18				
				eS		14	15				
			N	M				?	10		
630	19	G	E	(e)	07	38.7					
			E	eL		40	03				
			E	M				8	4		
631	20	G	N	eP	11	30	44				
				e(S)?		32	44				
			Z	L		33	05				
			E	M				7	21		
632	21	G	Z	e(P)?	07	14	43				
			E	eS		18	22				
			E	M				10	6		
633	22	G		+iP	10	25	22			50	地面波弱.
				i(PcP)		26	41				Surface waves small.
				i(PP)		27	25				
			E	S		32	34	9	5		
				G		37	58				
			E	M				17	4		
634	25	G	Z	P	20	19	42				弱, 近震.
			Z	e		20	18				Small, local.
635	29	G	Z	+P	01	42	34				
				e		46	50				

編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T	A	△	備註 Remarks
					h.	m.	s.	sec.	mm.	deg.	

International
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十二月 DECEMBER

636	1	G	Z	P	15	10	15				— 極遠,地面波連續甚長. Very distant quake, long continuation of surface waves.
				i(P')		13	37				
			E	M				15?	9		
637	2	G	Z	-P	15	38	04				25ca. 無地面波.
				i		38	13				No surface waves.
				i(pP)		38	29				
				i		38	50				
				iS		42	08				
638	2	G	Z	+iP	20	02	49	4	7		70ca. Compression from SE.
				i		04	01				
				iPP		05	11				
				i		05	49				
			N	iS		11	56	10	15		
				i(PS)		12	16				
			N	M				15	70		
			E	M				15	55		
639	3	G	E	P	06	31	29				20
				eS		35	11				
			N	i		35	21				
			E	eL		36	51				
			N	M				9	19		
			E	M				10	19		
640	4	G		e	07	49	05				遠震. Distant quake.
641	4	G	Z	-iP	16	36	49	4	9	15	Dilatation from SE.
			E	iS		39	30	5?	18		
				L		40	29				
			N	M				12	20		
			E	M				12	55		
642	5	G	Z	+P	21	56	13				14
			E	iS		58	50	7	19		
				L		59	50				
			E	M				13	48		



編號	日期	震儀	分向	震相	到達時刻			T	A	△	Remarks
No.	Date	Instr.	Comp.	Phase	G.M.T.			sec.	mm.	deg.	
					h.	m	s.				

九日十四時至十日一時間記時器發生障礙, 約九日二十二時有一地震無法計算。

Time mark failed between 14^h, 9th - 1^h, 10th, a fairly large earthquake recorded began at about 22^h, 9th, identification impossible.

643	10	G	Z	-iP	13	35	15	-	26	100ca.	Dilatation from SE.
			Z	i(pP)		36	35				無地面波.
			Z	i		36	59				No surface waves.
				i(PP)		38	59				
			N	iSKS	45	10		-	36		
				S	46	11					
644	11	G		i	15	05	49				
				e		09	28				
645	14	G	Z	-iP	02	04	46	-	40	79ca.	Dilataion from SE.
		I	E	iS		14	43				紀錄微弱, 可能係深源.
		G	N	M				16	115		Record faint, probably
			E	M				-	70		deep.
646	14	G	Z	(P)	14	36	05				遠震. Distant shock.
				e		40	26				
			E	i	44	18		12	8		
			E	M				18	25		
647	18	G	Z	P	15	51	42			36ca.	地面波弱.
			Z	i		52	03				Surface waves small.
			Z	i		52	20				
			E	eS		57	21				
			E	i		57	33				
648	22	G	Z	+iP	09	17	29	3	4	34	Compression from SW.
				i		17	56				地面波弱.
				i		18	44				Surface waves small.
			E	iS		22	55				
			E	G		25	16				
			E	M				11	9		
649	23	G		eP	08	57	20			21	
			NE	eS	09	01	11				



編號 No.	日期 Date	震儀 Instr.	分向 Comp.	震相 Phase	到達時刻 G.M.T.			T sec.	A mm.	Δ deg.	備註 Remarks
					h.	m.	s.				
650	24	G	Z	+iP	05	12	51			14	
			Z	i		13	08				
			NE	eS		15	25				
			E	M				8	18		
651	24	G		(iP)	09	19	10			14	餘震.
			E	S		21	43				After-shock.
			E	M				12	9		
652	25	G	EZ	(e)	21	47	11				
			E	eL		50	57				
			N	M				—	15		
			E	M				9	10		
653	28	G	E	(e)	12	57	28				微.
				i		57	53				Very small.
654	28	G	Z	-iP	22	46	19	2	5	23	無地面波.
			Z	i		47	02				No surface waves.
			NE	S		50	27				
655	29	G	Z	e(P)?	12	01	45				30ca. 記時器發生障礙.
				i?		01	51				Time-mark failed.
			E	S?		06	39	10	6		
			N	M				—	85		
			E	M				—	50		
656	30	G	Z	-P	17	01	00	5	3	8	Dilatation from SE.
			EZ	S		02	34				
			E	M				5	10		

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May 30, 1951.

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- | | |
|------------------|--|
| Apia..... | 1950 Jul. -Dec. |
| Batavia | 1949 Jan. -Mar. |
| Beograd | 1950 Jan. -Nov. |
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| De Bilt | 1950 Aug., Oct. -Dec.
1951 Jan. -Mar. |
| Dublin | 1950 Apr. -Dec. |
| Harvard | 1949 Jul. -Dec.
1950 Jan. -Jun.
L. Don Leet: Discussion of Tripartite Microseismic Measurements.
Francis Birch: Flow of Heat in the Front Range, Colorado. |
| Helsinki | 1950 Oct. -Dec. |
| Helwan | 1938 July. |
| Hongkong | 1950 Aug., Dec., Summary and 1951 Jan., Mar.
(Extract of Meteorological Observations).
1950 Oct. -Dec., 1951 Feb. -Mar. (Monthly Weather Summary).
G. S. P. Heywood: Hongkong Typhoons. |
| India | 1950 Jan. ^{Mar.} -Apr. |
| J. S. A. | 1949 Mar. |
| Ksara | 1950 Jul. -Dec. |
| Leipzig | 1945, 1946. |
| Malaga | 1950 Jan. -Apr. |
| Ottawa | 1950 Mar. -Jun., Nov. -Dec.
Ernest A. Hodgson: The Saint Lawrence Earthquake, March 1, 1925.
W. G. Milne: Bibliography of Seismology No. 7, Vol. XIV. |
| Pasadena | 1950 Sept. -1951 Apr. (Air Mail). |
| Perth | 1950 Apr. -Dec. |
| Queensland | 1949 Jun.
1950 Dec. |
| Riverview | 1949 Jan. -Dec. |
| Roma | 1950 Jun. -Oct.
1951 Jan. |

Saint Louis1949 Mar.

Strasbourg

Strasbourg1950 Aug. -1951 Feb. (incomplete).

Bureau Central1950 Jun. -Nov.

Union Geodesique et Geo-

physique Internationale1945 Dec.

1949 Feb.

1950 Jul. -Oct.

Annales de l'Institut de Physique du Globe-Univer-
site de Strasbourg, Nouvelle Serie Tome V, Troisieme
Partie, GEOPHYSIQUE. 1950.

Annales de l'Institut de Physique du Globe de
Strasbourg, Nouvelle Serie Tome VII et VIII, Deu-
xieme Partie-SEISMOLOGIE: Observations des Sta-
tions Francaises, 1942-1943.

Stuttgart1950 May-Sept.

Tokyo1950 Aug.

Toledo1950 May-Aug., Nov. -Dec.

1950 Dec.-1951 Jan. (Provisional)

Trieste1950 May-Aug.

U. S. C. G. S,Progress Report on Strong Motion Earthquake Work,
Oct -Dec., 1948.

Zurich1950 Nov. -Dec.

1951 Jan.